# Post-Diarrheal Hemolytic Uremic Syndrome (D+HUS) in Adults, FoodNet, 1997-2002 (amended)

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## **Background**

Limited information exists on D<sup>+</sup>HUS in adults, a life-threatening complication of infection with Shiga toxin-producing *E. coli* (STEC).

### **Methods**

We defined D<sup>+</sup>HUS as anemia, acute renal injury, and physician-diagnosed HUS with diarrhea in preceding 3 weeks. Definite cases also had microangiopathic findings on peripheral smear. FoodNet began surveillance for adult (age  $\geq$ 15 years) D<sup>+</sup>HUS through informal networks in 1997; hospital discharge data and medical charts were reviewed using ICD 9 Code 283. Case capture was incomplete and not all sites participated in all years.

#### **Results**

From 1997-2002, FoodNet sites reported 56 adults with D<sup>+</sup>HUS (37 definite, 19 probable). Their median age was 59 years (range, 15 to 87). Thirty-five (63%) were women and 47 (84%) White. None had malignancy, HIV, organ transplant, or pregnancy. Forty-three (77%) had bloody diarrhea and 25 (45%) had illness onset between July and September. Complications included seizure (21%), pneumonia (16%), paralysis (4%), and stroke (2%). Four (7%) had a laparotomy. Eleven (20%) died; their median age was 77 years (range, 24 to 83). Among survivors, 27% still required dialysis and 10% had a neurological deficit at discharge. *E. coli* O157:H7 was isolated from 23 (49%) of 47 stools tested, and serum antibodies to O157 lipopolysaccharide were present in 5 of 7 tested. In total, 28 (57%) had evidence of STEC O157 infection. Non-O157 STEC was not sought in most patients.

### Conclusion

As with pediatric HUS, most cases of adult D<sup>+</sup>HUS with a known etiology are due to STEC O157 infection. Prevention of STEC O157 infections could decrease the rate of this serious illness. Improved surveillance and microbiologic testing of adult D<sup>+</sup>HUS is needed to identify opportunities for prevention.